

CLAIMS

I/We claim:

- [c1] 1. A mobile communications system in a communications network configured for portability of mobile phone numbers, the system comprising:
 at least one data store for storing information identifying a mapping between a customer's portable phone number and a unique routable number, wherein the routable number allows calls made to the customer using the portable phone number to be routed to a portion of the mobile communications network associated with a mobile communications service provider;
 an administration subsystem for facilitating the storage of information in the data store; and
 a customer data subsystem for storing customer data records, wherein the customer data records include authorization information associated with a request by the customer to prevent unauthorized porting of the portable phone number.
- [c2] 2. The system of claim 1, wherein the request for unauthorized porting prevents mapping of the portable phone number to a routable number associated with an unauthorized mobile communications service provider.
- [c3] 3. The system of claim 1, wherein the data store is readable by multiple mobile communications service providers within the communications network.
- [c4] 4. The system of claim 1, mobile communications service provider has permission to write to the data store.
- [c5] 5. The system of claim 1, wherein the administration subsystem has exclusive permission to write to the data store.

[c6] 6. The system of claim 1, wherein the at least one data store comprises multiple regional data stores.

[c7] 7. The system of claim 1, wherein the at least one data store comprises a single network-wide data store.

[c8] 8. In a communications system including a mobile communications network configured to allow portability of mobile phone numbers, a method for preventing unauthorized switching of mobile communications service providers, the method comprising:

- associating a portable phone number with a customer and with a first mobile communications service provider;
- storing a record of the association between the portable phone number and the first mobile communications service provider in at least one data store that is accessible by multiple communications service providers within the mobile communications network;
- receiving a request for porting the portable phone number, wherein the porting includes associating a second mobile communications service provider with the assigned portable phone number;
- based on the request, analyzing a customer data record to determine whether the customer has authorized the requested porting by providing authorization information known by the customer; and
- if the customer has authorized the requested porting, storing in the at least one data store a record of a new association between the second mobile communications service provider and the portable phone number.

[c9] 9. The method of claim 8, wherein the assigned portable phone number is associated with the first mobile communications service provider using a first identifier unique to the first mobile communications service provider, and wherein the assigned portable phone number is associated with the second

mobile communications service provider using a second identifier unique to the second mobile communications service provider.

[c10] 10. The method of claim 8, wherein the assigned portable phone number is associated with the first mobile communications service provider using a routing number unique to the first mobile communications service provider, and wherein the routing number allows calls made to the customer using the assigned portable phone number to be routed to portions of the mobile communications network associated with the first mobile communications service provider.

[c11] 11. The method of claim 8, wherein the assigned portable phone number is associated with the second mobile communications service provider using a routing number unique to the second mobile communications service provider, and wherein the routing number allows calls made to the customer using the assigned portable phone number to be routed to portions of the mobile communications network associated with the second mobile communications service provider.

[c12] 12. The method of claim 8, wherein a third party administrator has permission to write to the at least one data store used to store the record of the association between the assigned portable phone number and the first mobile communications service provider.

[c13] 13. The method of claim 8, wherein the at least one mobile communications service provider has permission to write to the at least one data store used to store the record of the association between the assigned portable phone number and the first mobile communications service provider.

[c14] 14. The method of claim 8, wherein the customer provides the password to the second mobile communications service provider, and wherein the request for porting includes the password.

[c15] 15. The method of claim 8, wherein the request for porting does not include the password, and wherein the customer provides the password to the first mobile communications service provider prior to the analyzing of the request.

[c16] 16. In a communications system including a mobile communications network configured to allow portability of mobile phone numbers, a method for preventing unauthorized switching of mobile communications service providers, the method comprising:

receiving a request to prevent unauthorized porting of a portable phone number assigned to a customer, wherein the unauthorized porting comprises creating an association between an unauthorized mobile communications service provider and the assigned portable phone number so that calls made to the customer using the assigned portable phone number are routed to portions of the mobile communications network associated with the unauthorized mobile communications service provider;

storing a record of the request to prevent unauthorized porting of the assigned portable phone number; and

storing customer authorization information associated with authorizing porting of the assigned portable phone number.

[c17] 17. The method of claim 16, wherein the customer authorization information associated with authorizing porting of the portable phone number includes a password, and wherein the password is later provided before the completion of a porting request.

[c18] 18. The method of claim 16, wherein a third party database administrator receives the request to prevent unauthorized porting.

[c19] 19. The method of claim 16, wherein an authorized communications service provider receives the request to prevent unauthorized porting.

[c20]

20. In a communications system including a mobile communications network configured to allow portability of mobile phone numbers, a method for preventing unauthorized switching of mobile communications service providers, the method comprising:

associating a first routable number with a portable phone number, wherein the portable phone number is assigned to a customer, and wherein the first routable number allows calls made to the customer using the portable phone number to be routed to portions of the mobile communications network associated with a first mobile communications service provider;

receiving from a second mobile communications service provider a request for porting the portable phone number, wherein the porting includes associating a new routable number with the portable phone number, and wherein the new routable number allows calls made to the customer using the portable phone number to be routed to portions of the mobile communications network associated with the second mobile communications service provider; and

based on the request for porting, sending a message to the customer, wherein the message requests that the customer provide authorization for the request for porting.

[c21]

21. The method of claim 20, wherein the first routable number and the new routable number are mobile station identifiers (MSID) that are also specific to a mobile device owned by the customer.

[c22]

22. The method of claim 20, wherein the message sent to the customer is a voicemail message that the customer receives on a device associated with the assigned portable number.

[c23] 23. The method of claim 20, wherein the message sent to the customer is a text message that the customer receives on a device associated with the assigned portable number.

[c24] 24. The method of claim 20, wherein the message sent to the customer is an email message.

[c25] 25. The method of claim 20, wherein the message requests the customer to provide authorization by dialing a number listed in the message.

[c26] 26. The method of claim 20, wherein the message requests the customer to provide authorization by sending a text message.

[c27] 27. The method of claim 20, wherein the customer is an employer of a user of a mobile device associated with the portable phone number.

[c28] 28. A mobile communications system in a mobile communications network configured for portability of mobile phone numbers, the system comprising:

means for associating a portable phone number with a first mobile communications service provider;

means for storing a record of the association between the portable phone number and a mobile communications service provider in at least one data store so that information about the association is accessible by multiple communications service providers within the mobile communications network;

means for receiving from a second mobile communications service provider a request for porting the portable phone number, wherein the porting includes associating a second mobile communications service provider with the assigned portable phone number; and

means for analyzing a customer database to determine whether the customer has authorized the requested porting.

[c29] 29. A method for preventing unauthorized switching of mobile communications service providers, the method comprising:

receiving at a mobile communication device, an indication of a portable phone number associated with a first mobile service provider for use when calling the mobile communication device; and

receiving from a mobile communications service provider or a third party administrator, a notification of an option to prevent unauthorized switching of the first mobile service provider to a second mobile service provider, wherein the source has at least partial control of the switching; and

based on the received notification, providing authorization information for storage at the mobile communications service provider or third party administrator, wherein the authorization information can later be provided by the customer to authorize a switch from the first mobile communications service provider to a second mobile communications service provider.

[c30] 30. A computer-readable medium whose contents cause a computing device to prevent unauthorized switching of mobile communications service providers, by performing a method comprising:

associating a first routable number with a portable phone number, wherein the portable phone number is assigned to a customer, and wherein the first routable number allows calls made to the customer using the portable phone number to be routed to portions of the mobile communications network associated with a first mobile communications service provider;

receiving from a second mobile communications service provider a request for porting the portable phone number, wherein the porting includes

associating a new routable number with the portable phone number, and wherein the new routable number allows calls made to the customer using the portable phone number to be routed to portions of the mobile communications network associated with the second mobile communications service provider;

based on the request for porting, determining whether the customer has requested protection from unauthorized porting; and

where the customer has requested protection from unauthorized porting, sending a message to the customer, wherein the message requests that the customer provide authorization for the request for porting.

[c31] 31. The computer-readable medium of claim 30, wherein the computer-readable medium is a memory in the system of a mobile communications service provider or a memory in the system of a third party administrator.

[c32] 32. The computer-readable medium of claim 30, wherein the computer-readable medium is a logical node in a computer network receiving the contents.

[c33] 33. The computer-readable medium of claim 30, wherein the computer-readable medium is a computer-readable disk.

[c34] 34. The computer-readable medium of claim 30, wherein the computer-readable medium is a data transmission medium carrying a generated data signal containing the contents.

[c35] 35. A method for preventing unauthorized switching of mobile communications service providers, the method comprising:

receiving at a mobile communication device, an indication of a portable phone number associated with a first mobile communications service provider for use when calling the mobile communication device; and

receiving from a source a message requesting customer authorization for switching from the first mobile service provider to a second mobile service provider, wherein the source is associated with the first mobile communications service provider or a third party administrator, and wherein the source has at least partial control of the switching.

[c36] 36. The method of claim 35, wherein the received message is a voicemail message.

[c37] 37. The method of claim 35, wherein the received message is a text message.

[c38] 38. The method of claim 35, wherein the received message is an email message.

[c39] 39. The method of claim 35, wherein the received message includes a request for the customer to provide authorization by calling a phone number indicated in the message.

[c40] 40. The method of claim 35 wherein the received message includes a request for the customer to provide authorization by sending a text message.